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UNITED STATES DEPARTMENT OF AGRICULTURE Bureau of Home Economics Washington, D. C.

Home Economics Bibliography 5

HOUSEHOLD REFRIGERATION

A Partial List of References



INTRODUCTORY NOTE

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This is a revision of a list of references first compiled in 1928. It was undertaken at the request of the President's Conference on Home Building and Home Ownership as a part of the collection of data for the report of the Refrigeration Section of the Conference Committee on Fundamental Equipment. It includes, however, references to a number of articles which have appeared since that report was completed in 1932.

The purpose of this, as of the original compilation, is to meet the many requests received by the U. S. Bureau of Home Economics for information on household refrigeration. It is but a list of references, however, and in no sense a complete bibliography on household refrigeration. It includes a limited number of titles readily accessible in American libraries, and is restricted to publications in the English language.

The references are arranged under subject headings, and brief annotations are included where the title is not sufficiently explanatory. A number of the references are concerned mainly with theory. Others cite the results of research, especially investigations initiated in an attempt to develop methods for testing refrigerators. Some articles are listed which discuss in a popular way the facts about household refrigeration that are of special interest to the homemaker. Some references, concerned primarily with commercial installations and with the comparatively new field of summer air conditioning and house cooling, have been included because they contain certain material which has a distinct bearing on the problems of household refrigeration. It is hoped that this list will indicate the general scope of the available material on the subject of household refrigeration and show the very great need for further research in this important field.

HOUSEHOLD REFRIGERATION

A Partial List of References

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GENERAL REFERENCES

heated vapor.

Anonymous (1)

The refrigerating problem in the small home. Refrig. Engin. 23: 30-31. 1932.

Reviews report of subcommittee on refrigeration of the Committee on Fundamental Equipment of the President's Conference on Home Building and Home Ownership.

What kind of refrigerator is wanted? Jour. Home Econ. 21: 667-669. 1929.

Summary of survey of a typical American town of about 3,000 homes.

American Home Economics Association

When you buy a refrigerator. Amer. Home Econ. Assoc. Consumer Purchasing Leaflet 3, Ed. 2, rev., 6 p. 1932. (Reprinted in Elec. Refrig. News 6 (40): 17. 1932.)

Points to investigate when purchasing.

American Society of Refrigerating Engineers
The refrigerating data book and catalog; first edition, 1932-1933.
New York, Amer. Sec. Refrig. Engin. 435 + 127 p., illus. 1932.
Primarily for technicians, but valuable to laymen also.

Behre, C. H.

Dr. John Gerrie -- inventor of the ice machine. Refrigeration 49 (3):
22-23, 28, illus. 1931.

Bowen, J. T.

Refrigeration in the handling, processing, and storing of milk and milk products. U. S. Dept. Agr. Misc. Pub. 138, 59 p., illus. 1932.

Primarily for dairymen and farmers handling milk, but contains sections with special bearing on household refrigeration. Gives elementary principles with diagrams illustrating compression and absorption systems.

Buffington, R. M., and Gilkoy, W. K. (7)
Thermodynamic properties of dichlorodifluoromethane (F-12). Amer. Soc.
Refrig. Engin. Circ. 12, 12 p. 1931.
Includes tables of the properties of saturated vapor and of super-

Churchill, J. B. (8)
Domostic refrigerating machinery. Refrig. Engin. 18: 117-129, 148-154, illus. 1929.

Adapted from a paper presented by the author for the American Society of Refrigorating Engineers at the World Engineering Congress hold in Tokyo. First installment deals with the status of technical knowledge, the second with survey of the industry.

Cockrell, F. M. (Publisher) (9)

1932 refrigeration directory and market data book. 470 + 120 p., illus. Detroit. 1932.

Contains informative articles and statistical tables of the electrical refrigerating industry, directory of 2,000 manufacturers, and other information concerning the manufacture and sale of electric refrigerators, as well as specifications for household refrigerators made by 48 companies.

Denton, M. C. (10)

The household refrigerator. Jour. Home Econ. 8: 660-663. 1916.

Based on J. R. Williams' study made in Rochester, N. Y., in 1913.

Includes a discussion of temperature essential for effective food preservation, importance of adequate insulation and of a well-constructed lining, and the care of the refrigerator.

Donnicz, A. J. (11)

Getting good refrigeration. Good Housekeeping 88 (6): 94-95, 158, 160, illus. 1929.

Popular presentation of the fundamentals of securing satisfactory refrigeration in the home by use of ice, electric boxes, or gas-fired outfits.

Fisher, K. A.

A refrigerator that meets your needs. Good Housekeeping 89 (3): 94-95, illus. 1929.

Fiske, D. L.

Refrigeration progress during 1931; a survey of new developments in a record-breaking year. Refrig. Engin. 22: 371-378, illus. 1931.

Gray, G. (14)

Convenient kitchens, H. S. Dent, Agr. Fermors' Bul. 1513, 29 p., illus.

Convenient kitchens. U. S. Dept. Agr. Farmers' Bul. 1513, 29 p., illus. 1926.

Contains a section headed Refrigerator and Cold Cupboard, which gives suggestions for selecting a refrigerator, also a paragraph on the cold closet which in some climates serves instead of a refrigerator.

Hull, H. B. (15)

Household refrigeration. Ed. 3, rev. and onl. 491 p., illus. Chicago, Nickerson & Collins Co. 1927.

Technical treatise on principles, types, construction, and operation of refrigerators.

Johnson, E. (16)
Why refrigeration pays. Country Gent. 102 (6): 47. 1932.
Popular. Article on refrigeration in farm homes.

Kimberly, E. E. (17)

Comparative cost of ice and mechanical refrigeration. Ohio State Univ., Engin. Expt. Sta. News 1 (12): 10-11. 1930. (See also Refrig. World 65 (9): 17-18. 1930.)

Discusses comparative costs on the basis of vestance, which the author defines as the total present cost of a permanent service, including depreciation and operation.

Macintire, H. J., Marvel, C. S., and Ford, S. G. (18)
Cortain physical and chemical properties of methyl chloride. Refrig.
Engin. 14: 115-120, 138, illus. 1927.

Milligan, M. L. (19)
Caring for the refrigerator. Amer. Home 6: 116, 136, illus. 1931.

Moyer, J. A., and Fittz, R. U.

Refrigeration, including air conditioning and cooling and household automatic refrigerating machines. Ed. 2, 538 p., illus. New York,

McGraw-Hill Book Company, Inc. 1932.

A general treatise on large-scale refrigeration. Chapter V on Household Mechanical Refrigeration, p. 135-204, emphasizes construction details of certain small machines.

Pennock, G. L. (21)

Buying satisfaction in your refrigerator. Delineator 118 (5): 35, 52, illus. 1931.

Ten items to be expected in good refrigerators and six points to consider in purchasing.

Pierce, A. (22)
New light on an old subject -- refrigeration. McCall's 55 (10): 55, 58, 60, illus. 1928.

Refrigerators. Parents' Mag. 5 (9): 33, 52-53, illus. 1930.
Points to consider in buying a refrigerator.

President's Conference on Home Building and Home Ownership. (24)
Refrigeration. In Vol. 5, House Design, Construction and Equipment,
p. 276-309, 1932. Chapter by Louise Stanley, Mary E. Pennington,
Mrs. Paul E. Howe, Geo. B. Bright, and Jesse B. Churchill in report of
Committee on Fundamental Equipment.

Discusses temperature requirements, present home storage practices, types of equipment, standards, and management of modern refrigerators.

Recse, M. J. (25)
Farm home conveniences. U. S. Dept. Agr. Farmers' Bul. 927, 32 p., illus. 1922.

Contains section on construction of so-called iccless refrigerator, which uses evaporation for cooling effect and is adapted only to the more arid regions.

Rudan, W. L. (26)

Performance tests on evaporation type coolers. Agr. Engin. 10: 349-350, illus. 1929.

Stanley, L. (27)

Research on home refrigerators. Refrig. Engin. 16: 41-44, illus. 1928.

Progress report on studies undertaken at the Bureau of Home Economics designed to ascertain the basic facts in home refrigeration. (See also editorial note on page of contents.)

and Cline, J. A. (28)

Icc creams frozen without stirring. U. S. Dept. Agr. Leaflet 49, 8 p., illus. 1930. (Rev. ed.)
Gives directions and recipes.

Stevenson, A. R., Jr.

(29)

Refrigoration. Jour. Franklin Inst. 208: 143-187, illus. 1929.

A comprehensive sketch, mainly historical. Includes note on house heating and house cooling.

Tisdale, W. E. (30)

Mcchanical refrigeration. Sci. Mo. 22: 63-66. 1926.

Explanation of the general physical process employed in the different types of refrigerating machines, followed by a discussion of several systems of refrigeration.

- U. S. Department of Agriculture, Bureau of Home Economics
 Household refrigeration. Set of 6 black and white charts, each 16x20 inches. For sale by Government Printing Office, Washington, D. C. 20 cents per set. 1929. (Reprinted in Elect. Refrig. News 4 (2): 12-15. 1929; Ice and Refrig. 77: 212-217. 1929; and with explanatory notes in Home Service Work for the Ice Industry, by M. H. Kingsley.)

 Contents: 1. Using the temperatures in a good refrigerator.

 2. Be sure milk and meat are placed in coldest section. 3. Care of meat in the home. 4. Cold checks bacterial growth. 5. Use chough ice. 6. Save food not ice. Do not wrap your ice.
- U. S. Department of Commerce, Bureau of Standards

 Electric and gas refrigerators. U. S. Dept. Com., Bur. Standards Letter

 Circ. LC-297, 7 p. 1931. [Mimeographed.]

 General information for prospective purchasers of household
 refrigerators.

Wangner, E. D. (33) When refrigerators are mechanical. Small Home 11 (4): 16-18, 28, illus. 1951.

Wilkes, G. B. (34)

Artificial cold. Mass. Inst. Technol. Technol. Rev. 31: 265-312, illus. 1929. (Reprinted in Annual Report of the Smithsonian Institution (1928/29): 229-235, illus. 1930.)

A popular lecture touching on several aspects of refrigeration.

Williams, J. R. (35)

A study of refrigeration in the home and the efficiency of household refrigerators. Third International Congress of Refrigeration Rpt., Eng. ed., vol. 3: 9-20. (Abstract in Jour. Amer. Med. Assoc. 61: 932-935, and Expt. Sta. Rec. 30: 165-166. 1913.)

Report of first extensive study of refrigoration in the home. Data from approximately 500 homes in Rochester, N. Y.

Wood, D. C. (36)

A study of some factors affecting efficient refrigeration in the home. Committee on the Relation of Electricity to Agriculture News Letter No. 9: 2-4, June 25, 1930.

Tests made with two iced and two electric refrigerators.

Woolrich, W. R. (37)

Handbook of refrigerating engineering. 331 p., illus. New York, Van Nostrand. 1929.

Technical. A comprehensive text designed primarily for engineers and engineering students. Some sections have bearing on household refrigeration.

FOOD PRESERVATION

Anonymous (38)

Kelvinator publishes data of survey on methods of 356 meat markets. Refrig. Food News 2 (9): 2. 1932.

Report of a trade research organization employed by Kelvinator corporation to gather data as sales material.

Associates of Dr. Lore A. Rogers (39)

Fundamentals of dairy science, by associates of Lore A. Rogers in the research laboratories of the Bureau of Dairy Industry, United States Department of Agriculture. 543 p., illus. New York, The Chemical Catalog Co., Inc. 1928.

Technical discussion of constituents, physical chemistry, microbiology, and nutritional value of milk and milk products.

Ayers, S. H., Cook, L. B., and Clemmer, P. W.

The four essential factors in the production of milk of low bacterial count. U. S. Dept. Agr. Bul. 642, 63 p., illus. 1918.

Baldwin, B. N. (41)

Lct your refrigerator help you. Pictorial Rev. 31 (9): 41, illus. 1930. Gives elementary principles of food preservation and details of refrigerator management.

FOOD PRESERV.TION (CONTINUED)

Birdseye, C. (42)

Where quick-frozen vegetables stand today. Food Indus. 3: 213, illus. 1931.

One of several articles composing a refrigeration and frozen foods number.

(43)

Preservation of foods by new quick-freezing methods. Refrig. Engin. 25: 185-188, 201, illus. 1933.

Reviews progress in quick-freezing methods and includes brief discussion of keeping qualities and cooking.

Bowen, J. T. (44)

The danger point in refrigeration. Refrig. Engin. 19: 23-24. 1930.

Discusses yeasts, molds, and bacteria in relation to food and their reaction to low temperatures.

Broadhurst, J., and Van Arsdale, M. B. (45)
Food in the house refrigerator. Nation's Health 6: 595-597, illus. 1924.
(Reprinted in Columbia Univ., Teachers Col. Rec. 26: 230-245. 1924.)
Report of a study in bacterial changes in relation to temperature and humidity with recommendations for the housewife.

Carlsson, V. (46)

Food changes in an ice refrigerator and an electrically controlled refrigerator: A comparative study. Columbia Univ., Teachers Col. Rec. 27: 643-655, illus. 1926. (Same material published in Nation's Health 8: 233-236, illus. 1926.)

Range and constancy of temperature and humidity were studied in relation to becterial increase in foods and keeping quality.

Carpenter, R. S.
Milk for the family. U. S. Dept. Agr. Farmers' Bul. 1705. 1933. (In press.)

Contains section on home care of milk with discussion of temperatures and placing of milk in refrigerators.

Cook, F. L. (48)

Causes of food spoilage. Rofrig. Engin. 14: 132-133. 1927.

Popular article compiled from set of lessons used by writer in instructing service men for a corporation manufacturing electric refrigerators.

Fisher, D. F. (49)
Physiological and pathological research and its relation to perishable

Physiological and pathological research and its relation to perishable food conservation. Ico and Refrig. 82: 77-79. 1932.

Discusses factors in successful handling of perishable foods, and describes methods of treatment.

Food Industries (50)

Preserving foodstuffs by quick freezing and refrigeration. 240 p., illus. New York, McGraw-Hill Publishing Company. 1931.

FOOD PRESERVATION (CONTINUED)

Grimes, J. C., Sewell, W. E., and Cottier, G. J. (51)

The use of ice in curing pork on the farm. Ala. Agr. Expt. Sta. Circ. 62, 8 p., illus. 1932.

Industrial and Engineering Chemistry

(52)

Symposium on some aspects of the problem of the preservation of foods. Indus. and Engin. Chem. 24: 661-686, illus. 1932.

Several of the papers deal with topics in the field of quick-frozen foods.

Johnson, A. L.

(53)

Bacteriology of the home. 167 p., illus. Peoria, Illinois, Manual Arts Press. 1929:

Chapter 6, The Refrigerator, P. 57-60.

Jordan, R. (54)

Care and use of the home refrigerator for food preservation. Purdue Univ. Ext. Bul. 147, 8 p., illus. 1926.

Murray, E. M. (55)

Bacteriological tests on the efficiency of various types of household refrigerators. 51 p. Ames. (Thesis, M. S., Iowa State College.) 1926. [Typewritten.]

Report of a study attempting to measure accurately the deterioration of food kept at different temperatures in various types of household refrigerators. Includes report on a study of the causes of deterioration due to bacterial activity, improper care of the refrigerator, and the contributing effect of temperaturos.

National Electric Light Association

(56)

The preservation of food. New York, Elect. Refrig. Bur., Natl. Elect. Light Assoc. 20 charts, 17 x 24 inches. 1931.

Black and white charts showing development of refrigeration for the home from the time of the earliest cave man to the present.

Pabst, A. M. (57

Meat-keeping in home refrigerators studied in varying conditions. U. S. Dept. Agr. Yearbook 1931: 369-370. 1931. (Reprinted as Yearbook Separate 1228.)

Results of bacteriological study conducted by Bureau of Home Economics

(57a)

Milk in the household refrigerator. Ice and Refrig. 76: 14-15. 1929.

Parfitt, E. H. (58)

The home refrigerator. Purdue Univ. Agr. Expt. Sta. Circ. 124, 12 p., illus. 1925.

Report of a study of the relation between temperatures obtained in two household refrigerators using ice and in a window box, and the rate of bacterial growth; the relation between the amount of ice in the ice chamber and the temperatures maintained in the food compartment; and the effect of wrapping the ice upon temperatures, ice meltage, and upon flavor of foods.

FOOD PRESERVATION (CO	ONTINUED)
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Pennington, M. E.

(59)

Why we refrigerate foods. Natl. Assoc. Ice Indus, Household Refrig. Bur. No. 6, 7 p. 1926.

Popular discussion of role of bacteria, yeasts, and molds in causing food spoilage and value of household refrigerator in retarding their growth.

(60)

Better food for the masses. Ice and Refrig. 75: 33-35, illus. 1928.

Shows how dietetic improvements, made possible by refrigeration in the home and elsewhere, have resulted in better health conditions.

(61)

Journeys with refrigerated foods - Eggs. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 9, 8 p. 1928.

(62)

Home refrigeration of fresh vegetables. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 11, 8 p. 1929.

(63)

Journeys with refrigerated foods - Fruits. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 13, 8 p. 1930.

(64)

Keeping frozen foods hard frozen in the shop of the retailer. Ice and Refrig. 81: 169-172, illus. 1931.

Describes a display case for retailers of frozen foods.

(65)

Refrigerated or recently laid eggs - which do you prefer? A study of flavor and eating quality. Ice and Refrig. 82: 197-198. 1932.

Results of a five years' study of refrigerated eggs in 38 rooms of 12 warehouses in territory ranging from Minnesota to Kansas and from Nebraska to the Atlantic.

Prescott, S. C.

Bacteria as affected by temperature. Refrig. Engin. 23: 91-96, 102, illus. 1932.

Bates, P. K., and Highlands, M. E. (67)

Numbers of bacteria in frozen food stored at several temperatures. Amer.

Jour. Pub. Health 22: 257-262. 1932. (See also Ice and Refrig. 82: 311-313. 1932.)

A preliminary report covering data on quick frozen haddock, lamb chops, spinach, strawberries, raspberries, and orange juice.

Rector, T. M. (68)
Scientific preservation of food. 213 p. New York, Wiley and Sons, Inc.

Defines food preservation and discusses methods of retarding food spoilage.

FOOD PRESERVATION (CONTINUED)

Straka, R. P., and James, L. H. (69)

A health aspect of frozen vegetables. Amer. Jour. Pub. Health 22: 473-492.

Technical. A progress report of an investigation in which 1,200 containers of peas were frozen after being inoculated with buffer suspensions of dried Clostridium botulinum spores.

Tanner, F. W. (70)

The microbiology of foods. 768 p. Champaign, Ill., The Twin City Printing Co. 1932.

Textbook.

Thom, C. (71)

Food poisoning and its prevention. Amer. Food Jour. 17 (11): 15-16, 33, 36. 1922.

and Hunter, A. C. (72)

Hygienic fundamentals of food handling. 228 p., illus. Baltimore, Williams and Wilkins. 1924.

Very clear, comprehensive presentation of the underlying principles and problems of food preservation and spoilage. Includes discussions of proper food standards, means of preserving food and preventing spoilage and care of the food from time of production until it appears on the market.

U. S. Department of Agriculture, Bureau of Home Economics (73)
Care of food in the home. U. S. Dept. Agr. Farmers' Bul. 1373, 12 p.
1923.

Discusses forms and causes of food spoilage and the function of the refrigerator in keeping foods in the home.

Woodroof, J. G. (74)

Preservation freezing - some effects on quality of fruits and vegetables.
Ga. Agr. Expt. Sta. Bul. 168, 23 p., illus. 1931.

Workers in seven States attest the success of freezing as a method of preserving fruits and vegetables. Includes a bibliography of 35 references. Quoted at some length in Ice and Refrig. 82: 313-314, illus. 1932. See also Refrig. Engin. 23: 366, 368, 370, 382. 1932.

Woolrich, W. R. (75)

Some physical and chemical properties of foodstuffs. Ice and Rofrig. 79: 493-494. 1930.

Discusses freezing points of fruits and vegetables. Method of predicting latent heats of foodstuffs from their vater content. Effect of fermentation, results anticipated from the quick-freeze industry.

HOW TO USE THE HOME REFRIGERATOR

Broadhurst, J., and Carlsson, V. (76)
Keeping food in the home refrigerator. Good Housekeeping 83 (1): 96. 1926

HOW TO USE THE HOME REFRIGERATOR (CONTINUED) Jordan, R. (77)Factors in the management of the ice-cooled refrigerator in the home. Purdue Univ., Agr. Expt. Sta. Bul. 316, 32 p., illus. 1927. Nichols, N. B. (78)Keep the lid on. Woman's Home Companion 58 (8): 62, illus. Discusses receptacles for use in refrigerators. (79)Keeping posted on your refrigerator's temperature. Woman's Home Companion 56 (7): 78, illus. 1929. (80) What is in your refrigerator? Woman's Home Companion 57 (6): 94-97, illus. 1930. New contrivances on ice and mechanical refrigerators. Pennington, M. E. (81)The care of the home refrigerator. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 4, 4 p. 1924. (82)Where to place food in the household refrigerator. Natl. Assoc. Ice Indus. Household Refrig. Bur. No. 3, 8 p., illus. 1924. (83)The care of the child's food in the home. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 5, 20 p., illus. 1925. (84)How to use a good refrigerator. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 10, 8 p. 1929. Pennock, G. L. (85)Three meals a day with your refrigorator. Delineator 116 (5): 42, 57, Experiences of four adults with mechanical boxes of four and five cubic feet capacity over a week or so at a time.

Sawyer, M. F.

How to use your mechanical refrigerator. Ladies' Home Jour. 48 (8): 70,
74, illus. 1931.

Agr. Yearbook 1930: 453-454, illus. 1930.

Refrigerator economy is not increased by blanketing the ice. U. S. Dept.

Porter, M. B.

(86)

ICE AND ICE REFRIGERATION

Anonymous (88)

Percapita consumption of ice. Ice and Refrig. 73: 232. 1927.

Report of study by an ice company to determine variation in per capita consumption due to climatic condition, degree of urbanization, difference in living habits, and availability of natural ice.

(89)

Plans for advertising the ice industry in 1928. Ice and Refrig. 73: 211, 214. 1927.

Cites cost of ice service in average household from ice bills of 4,000 users, tabulated for three groups of homes.

(90)

Commercial refrigerator temperatures. Ice and Refrig. 77: 158, illus. 1929.

Table of temperatures recommended for use under normal or average operating conditions for various commercial installations common in the retail merchandising trade.

(91)

Availability of ice to farmers. Ice and Refrig. 78: 510-512. 1930.

Based on survey among ice companies by Ice and Refrigeration in cooperation with Successful Farming. (Editorial, p. 560.)

(92)

Annual report of ice prices. Ice and Refrig. 84: 331-336; Analysis, 336-337. 1933.

Statistical summary of ice prices for 1933 as they prevail in many cities and towns throughout the United States and Canada. An annual feature of the May issue of Ice and Refrigeration. (Editorial, p.363.)

Belshaw, C. F.

Broken-ice refrigeration. Refrig. Engin. 16: 67-78, illus. 1928.

(See also editorial note on page preceding 67.)

Bowen, J. T. (94)

Harvesting and storing ice on the farm. U. S. Dert. Agr. Farmers' Bul. 1078, 30 p., illus. 1922.

Discusses sources and methods of harvesting ice and construction of various types of ice houses, with specifications.

Dawson, J. R., and Watt, A. L.

The ice well for a dairy farm. U. S. Dept. Agr. Circ. 155, 12 p., illus.
1931. (See also Ice and Refrig. 81: 148-149, illus. 1931.)

Faherty, J. P. (96)
Outside icer in Washington, D. C. Ice and Refrig. 73: 247, illus. 1927.

ICE AND ICE REFRIGERATION (CONTINUED)

Field, C. (97)

Machinery for continuous ice production. Refrig. Engin. 17: 35-40, illus. 1929. (See also Ice and Refrig. 79: 168-172, illus. 1930, and Refrigeration 47 (6): 29-34, illus. 1930.)

Discusses advantages of ice cakes with maximum heat absorbing surface (Flakice) and describes one patented Flakice machine.

Herter, C. H. (98)

Once-a-week-iced refrigerators. Refrig. World 67 (1): 35-36, 60, illus. 1932.

Reports test of two household refrigerators. (Translated from German.)

Kingsley, M. H. (99)

Home service work for the ice industry. A primer to assist those who are just entering into home service work. 120 p., illus. Chicago, Nickerson & Collins Co. 1931.

Contains informative chapters on food preservation, structure of ice refrigerators and how to use them.

Lanman, F. R. (100)

A study of ice chests. Ohio Agr. Expt. Sta., Bimo. Bul. 153, p. 209-215.
1931. (Reprinted in Merch. Ice. 3: 172-173, 176. 1932.)
Reports study of two small ice chests, comparing ice meltage and food-keeping quality.

Mueller, I. F. (101)
Camping and touring ice box. Indus. Arts Mag. 18: 267, illus. 1929.
Popular. Gives directions for making box.

Northey, E. N. (102)
Care free ice refrigeration. Ice and Refrig. 74: 573-574, illus. 1928.
Discusses outside icer and its advantages.

Pankey, A. V. (103) Selling ice by meter. Refrigeration 48 (5): 32-33. 1930.

Pennington, M. E. (104)

Cold is the absence of heat. Natl. Assoc. Ice Indus., Household Refrig.

Bur. No. 8, 20 p., illus. 1927.

Popular discussion of the principles of refrigeration using ice.

The romance of ice. Natl. Assoc. Ice Indus., Household Refrig. Bur.
No. 7, 15 p., illus. 1927.
Brief history of the use of natural and manufactured ice and how it functions in the household.

Starr, J. E. (106)
Refrigerator temperatures. Ice and Refrig. 72: 86-87. 1927.

Gives formulas for calculating amount of ice meltage and temperature of food storage compartment at different room temperatures when these are known for given room temperatures.

ICE AND ICE REFRIGERATION (CONTINUED)

Starr, J. E.

(107)

First principles in household refrigerator construction. Ice and Refrig. 72: 178-179, illus. 1927.

Taylor, W. H.

(108)

The pak-ice machine. A new development in refrigeration. Refrig. Engin. 22: 307-309, illus. 1931. (Excerpt in Refrig. World 66: 12-14, illus. 1931.)

ELECTRIC REFRIGERATION

Anonymous

(109)

What of the electric refrigerator? Sci. Amer. 133: 194. 1925.

Quotes National Electric Light Association report to show comparative cost of refrigeration with ice and with electricity.

(110)

Status of electric refrigeration and national refrigeration survey: Elect. World 88 (18): [895]-913, illus., and supplement, sect. 2, 12 p. 1926.

Analysis of nation-wide survey tabulated in section 2, with discussion of its meaning for the future of electric refrigeration.

(111)

Kelvin discovered basic principles of refrigeration. Elect. Refrig. News 1 (21): 2. 1927.

Discusses Kelvin's contribution to electric refrigeration.

(112)

Market survey is made on electric refrigeration. Refrig. Engin. 22: 183. 1931.

Survey by students in advertising and marketing classes of a university, inquiring of housewives in several localities to learn just what was wanted in electrical refrigeration.

(113)

Code of cthics sponsored by the N. E. M. A. refrigeration division.

Elect. Refrig. News, Merch. Sect. 6 (33): 10. 1932.

Text of Standard Trade Practices, Electric Refrigeration Industry.

Ackerman. W. T.

· (114) ·

Electric household refrigeration. N. H. Agr. Expt. Sta. Bul. 244, 23 p., illus. 1929.

Based on rural electrification project at New Hampshire Agricultural Experiment Station.

Brunig, M. P.

(115)

A mechanical refrigeration study. Agr. Engin. 10: 268, illus. 1929.

Indicates that ventilation of air-cooled condenser of portable electric household refrigerator may greatly affect current consumption.

ELECTRIC REFRIGERATION (CONTINUED)

Committee on Relation of Electricity to Agriculture

(116)

Electricity on the farm and in rural communities. Committee on the Relation of Electricity to Agriculture Bul. 7 (1), 332 p., illus. Chicago. 1931.

Domestic refrigeration, p. 33-41.

Cornell, K.

·(117)

Fundamentals of electric refrigeration. Home Econ. 6: 29-30, 43-44, illus. 1928.

McCuen, G. W., and Blauser, I. P.

(118)

Using electricity on Ohio farms. Ohio Agr. Col. Ext. Bul. 96, 31 p., illus. [1930.]

Data for 13 farms during three years of study show costs of electricity to operate home conveniences and farm machinery.

McPherson, H. W.

(119)

Domestic refrigeration - old and new angles. Refrig. Engin. 22: 269, 274, 306, 313, 319. 1931.

A series of articles on refrigeration for the home kitchen from viewpoint of engineering design, maintenance, and hope of profit.

Miller, G. E.

(120)

Electrical refrigeration for the home. Jour. Home Econ. 18: 303-307. 1926.

Presents essential features of electric refrigeration and discusses machine, cabinet, cost of equipment, cost of operation and maintenance, and care of the equipment.

Montfort, P. T.

(121)

Annual progress report to the Texas Committee on the Relation of Electricity to Agriculture. 146 p., illus. College Station, Texas, A. & M. College. 1930. [Mimeographed.]

Report on domestic refrigerators, p. 60-65. Gives energy consumption by months for 10 refrigerators of different sizes.

National Electric Light Association

(122)

Report of electric refrigeration committee, 1924-25. Commercial National Section. 67 p., illus. New York, National Electric Light Association. 1925.

Reports detailed tests of several electric refrigerators and gives specifications for a number of household refrigerating machines.

Patty, R. L.

(123)

Cost of electricity for the home electric refrigerator. So. Dak. Agr. Expt. Sta. Bul. 241, 16 p., illus. 1929.

Reports results of tests of 8 farm home refrigerators.

ELECTRIC REFRIGERATION (CONTINUED)

Roe, C. H. (124)

Electric refrigerators and electric refrigeration. Ice and Refrig. 80: 473-474. 1931.

Comments on importance of tests and lists important features of refrigerator performance and construction.

Stewart, E. A., Larson, J. M., and Romness, J. (125)
The Red Wing project on utilization of electricity in agriculture.
153 p., illus. St. Paul, Minn. Agr. Expt. Sta. 1930.
Includes table giving energy consumption of four electric refrigerators by months for three years or less.

Stillman, C. (126)

A cost study of the "unit" vs. central system. Refrig. Engin. 22: 155-162, 190, illus. 1931.

. The layout of a cafeteria in an industrial plant is described and illustrated, showing both present and proposed equipment. Tables list initial costs and power costs, of "unit" plan and central system with brine circulation.

Taubeneck, G. F. (127)

A message to dealers. Elect. Refrig. News, Merch. Sect. 7 (1): 1. 1932.

Warns against poorly constructed electric refrigerators, manufactured under 1932 price pressure, and against "opportunist manufacturers."

Whitton, M. O. (128)

The new servant - electricity in the home. 326 p., illus. Garden City, New York, Doubleday, Page and Co. 1927.

Explains in simple terms "what every woman can know about electricity; describes electrical equipment and new household technic due to use of electricity. Refrigerator construction and operation, chapter 13, p. 213-226.

GAS FIRED REFRIGERATORS

American Gas Association (129)

Refrigeration with gas - why and how. Report of refrigeration by gas committee. 61 p., illus. New York, American Gas Association. [1925.]

Hainsworth, W. R. (130)

Operating cost of household refrigeration by gas. Refrig. Engin. 13: 245-248, 252, illus. 1927.

Discusses relative efficiency and cost of electric and gas refrigeration, with chart and table.

(131)

Electrolux engineer describes air-cooled system. Operating cycle of machine explained. Elect. Refrig. News 8 (13): 12. 1933.

Keeler, H. E. (132) Refrigeration by direct application of heat. Gas Indus. 21: 275-279.

1927.

GAS-FIRED REFRIGERATORS (CONTINUED)	
Renaissance of the absorption refrigeration cycle. Indus. and Engi	133)
Chem. 21: 477-480, illus. 1929.	.11.
States the principle of absorption refrigeration, mentions its	;
early use and the simplicity of the essential apparatus employed,	
lists with brief description and diagram several absorption syste	ms.
Leighton, H. W. (134)
Installation and service practices of gas refrigerators. Gas Age-R 66: 365-366, 370. 1930.	(eco
Gas company executives and service men are told how to install	
service household gas refrigerators so the householder obtains the maximum of use and the company the minimum of trouble calls.	iG.
Otto, S. (135)
	927
Taylor, R. S.	136
Heat operated refrigerating machine of the absorption type. Refrig Engin. 17: 136-143, 149, illus. 1929.	5•
Whitney, L. F.	137
The mercury ejector refrigerator. Refrig. Engin. 24: 143-146, illu 1932.	
DRY ICE OR SOLID CO2	
Goodwin, A. E. (138
Natural production of carbon dioxide gas. Ice and Refrig. 79: 218, illus. 1930.	
Jones, C. L.	139
The manufacture of solid CO_2 . Ice and Refrig. 81: 177-180, illus.	
,	140
The safety of "dry-ice." Refrigeration 50 (4): 46, 48. 1931.	
Martin, J. W. (141
The field of dry ice in modern refrigeration. Refrig. Engin. 15: 3 43, 55, illus. 1928.	33-34
	142
	L930
U. S. Department of Commerce, Bureau of Standards (143

Describes carbon dioxide, its sources, properties, and uses. Lists firms manufacturing machinery used in the production of solid carbon dioxide. Bibliography of 14 references.

Solid carbon dioxide. U. S. Dept. Com., Bur. Standards Letter Cir. 286. 6 p. 1930. [Mimeographed.] (Reprinted in Ice and Refrig. 79: 405-

406, 1930.)

REFRIGERATOR DESIGN AND CONSTRUCTION

Anonymous (144)

Specifications for household refrigerators. Ice and Refrig. 73: 137-139.

Seven main points to consider.

(145)

Three points cited as essentials in good cabinet construction. Elect. Refrig. News 2 (18): 12. 1928.

Belshaw, C. F. (146)

Ice baskets for domestic refrigerators. Refrig. Engin. 20: 291-294, 318, illus. 1930.

Grupe, W. F. (147)
Mounting insulation in refrigerators. Refrig. Engin. 15: 136, 141. 1928.

Miskella, W. J. (148)

New developments in finishing as related to refrigerators. Refrig. Engin. 17: 173-177, illus. 1929.

National Lumber Manufacturers Association (149)
High humidity tests on wood exterior refrigerators. 40 p., illus.
Washington, D. C. 1929. (See also Refrig. Engin. 18: 136. 1929.)

Pennington, M. E. (150)

The construction of household refrigerators. Ice and Refrig. 74: 521-525. 1928. (See also Refrig. World 63: 17-22. 1928.)

Paper presented at the Fifth International Congress of Refrigeration, reviewing progress in household refrigerator construction and stating the requisites of an efficient cabinet.

(151)

The modern trend in household refrigerators. Refrigeration 44 (2): 58-62, illus. 1928.

(152)

The cold air duct in the household refrigerator. Refrigeration 46 (1): 63. 1929.

(153)

Buying a refrigerator. Natl. Assoc. Ice Indus., Household Refrig. Bur. No. 12, 8 p. 1930.

Popular articlo dealing with points to look for in ice-cooled cabinet.

(154)

Food space vs. ice space in the household refrigerator. Merch. Ice 3: 330-331. 1930.

REFRIGERATOR DESIGN AND CONSTRUCTION (CONTINUED)

Ponnington, M. E.

(155)

What we ought to know about refrigerators. Ice and Refrig. 78: 54-60, illus. 1930.

Paper presented at the Twelfth Annual Convention of the National Association of Ice Industries in November, 1929. Contains a resume of development of the fundamental idea back of good refrigerators; and gives a table showing the average milk compartment temperature, large food space temperature, and daily ice meltage for tested cabinets of the A, B, and C grades at room temperatures of 75°, 80°, and 90°F. Several cuts illustrate improved construction of various points emphasized in discussions of cabinet building in previous years.

(156)

The newer items in construction of ice-cooled refrigerators. Ice and Refrig. 80: 189-191. 1931.

(157)

Noteworthy improvements in refrigerator construction. Merch. Ice 5: 55-57, illus. 1931.

Pope, H. L., and Brown, J. R. (158)

The general design of refrigerator cabinets of the household icc-box type.

Refrig. Engin. 16: 11-14. 19; discussion. 141-143. 1928.

Robertson, G. A. (159) Shape of the ice household refrigerator. Refrigeration 42 (3): 58-59.

Sealey, P. T. (160)
"Finishing" the refrigerator. Elect. Refrig. News 2 (16): 5. 1928.

Williams, E. T. (161)
Shaft scals. Refrig. Engin. 17: 73-78, illus. 1929.
Illustrates and describes a number of shaft scals in successful operation.

INSULATION, INSULATING MATERIALS, AND HEAT TRANSFER

American Society of Refrigerating Engineers (162

Heat transmission of insulating materials. Amer. Soc. Refrig. Engin., Insulation Com. Ann. Rpt. (1922), rev. 1924. 114 p., illus. New York. 1924.

Technical discussion by a number of authorities. Also, p. 95-114, bibliography of literature to 1920 on heat insulation and heat transfer.

American Standards Association (163)
Symbols for heat and thermodynamics. Amer. Standards Assoc. ZlOc-1931,
8 p. 1931.
American tentative standard.

INSULATION, INSULATING MATERIALS, AND HEAT TRANSFER (CONTINUED)

Carpenter, R. C. (164)

The properties of balsa wood. Amer. Soc. Refrig. Engin. Jour. 3 (6): [30]-53, illus. 1917.

Reports study of balsa wood to determine its strength and insulating qualities.

Deuvel, C. C. (165)

Effective moisture in the refrigerator. Refrig. Engin. 15: 89-92, illus. 1928.

Discussion of importance of insulation, effect of moisture or vapor on material, and method of moisture proofing used in manufacture of refrigerators.

Finck, J. L. (166)
Mechanism of heat flow in fibrous materials. U. S. Dept. Com., Bur.
Standards Jour. of Research 5: 973-984, illus. 1930. (Research
Paper 243.)

and Van Dusen, M. S. (167)

The refrigerator cabinet; new heat flow studies. Refrig. Engin. 22: 310-313, 385-387, 406, illus. 1931.

Technical. Discusses principles of heat flow with reference to design and performance of cabinets, and presents calculations for some typical structures. Compares insulating value of a number of materials, and estimates effect of certain structural members and materials on heat transmission. Develops simple relation showing how inside temperature is affected by outside temperature, thickness of insulation, and amount of ice or temperature of evaporator.

George, H. (168)

New insulation studies: (1) Heat transmission in Balsam Wool; (2) porosity
and infiltration of various materials in design of insulation against
moisture. Refrig. Engin. 23: 155-160, illus. 1932.

Description of apparatus and report of tests.

Gregg, J. L. (169)

Properties of metal foil as an insulating material. Refrig. Engin. 23: 279-283, 288, 290, 304, illus. 1932.

Grundhofer, E. F. (170)

An investigation of certain methods for testing heat insulators. Penn. State Col., Engin. Expt. Sta. Bul. 33, 71 p., illus. 1925.

A technical report of research on four methods of testing low temperature heat insulators and revision of an earlier bibliography on heat insulation and hoat transfer.

King, W. J.

Recent developments in heat transmission. Refrig. Engin. 24: 76-80, illus.

1932.

INSULATION, INSULATING MATERIALS, AND HEAT TRANSFER (CONTINUED)

Knight, J. L. (172)

The use of paper as refrigerator insulation. Refrig. Engin. 22: 88-89,105, 120. 1931.

Lloyd, E. C. (173)

Insulation. Refrig. Engin. 18: 163-164. 1929.

Mainly historical, devoted chiefly to pure corkboard. Contains a good summary of insulation requirements.

McPherson, H. W. (174)
Migration of moisture in refrigeration insulation. Refrig. Engin. 24:
209-213, 248, 277-282, illus. 1932.

Mason, R. B. (175)
Thermal insulation with aluminum foil. Indus. and Engin. Chem. 25:
245-255, illus. 1933.

Miller, L. F. (176) Effect of moisture on the heat transmission in insulating materials.

Refrig. Engin. 14: 141-144, 161, illus. 1927.

Results of experiments on insulating value of wood, cane, flax, and rag felt as influenced by the degree of moisture.

Pearce, G. T. (177)
Recent improvements in refrigerator construction. Refrig. Engin. 21: 265-266. 1931.

Brief review by representative of an insulation manufacturing company.

Peebles, J. C. (178)

Thermal insulators. Ice and Refrig. 74: 22-23. 1927.

Paper presented at meeting of National Association of Practical

Paper presented at meeting of National Association of Practical Refrigerating Engineers describing two methods used at Armour Institute for testing thermal insulators - the flat plate and the hot box.

Thomas, P. E. (179)
Cork insulation. 534 p., illus. Chicago, Nickerson & Collins Co. 1928.
A treatise particularly valuable in any study of the properties of insulation in general. Chapter 16 especially informative as to home cabinets.

Van Dusen, M. S.

Heat transfer through metal-inclosed insulation. U. S. Dept. Com., Bur. Standards Jour. of Research 5: 385-397, illus. 1930. (Research Paper 207.)

(181)

Note on the theory of heat conduction. U. S. Dept. Com., Bur. Standards
Jour. Research 4: 753-756, 1930. (Research Paper 178.)

Mathematical. Gives a simple transformation of the general equation
of heat flow which does not appear to be generally known.

INSULATION, INSULATING MATERIALS, AND HEAT TRANSFER (CONTINUED)

Van Dusen, M. S., and Finck, J. L. (182)

Heat transfer through building walls. U. S. Dept. Com., Bur. Standards
Jour. of Research 6: 493-522, illus. 1931. (Research Paper 291.)

Gives construction and calibration of a small cork composition conductimeter.

REFRIGERATOR TESTING

Anonymous (183)

Tests on household refrigerator. Ice and Refrig. 68: 356, illus. 1925.

Report of tests on an ice-cooled refrigerator by J. C. Smallwood in the physical laboratories of Johns Hopkins University.

 $(184)^{4}$

Efficiency test of domestic refrigerators. Ice and Refrig. 70: 305-310, illus. 1926.

(185)

Analysis of household refrigerator tests. Ice and Refrig. 73: 230-231. 1927.

Compilation of "tests made by recognized authorities on 23 different household refrigerators, all about same rated ice capacity and built by 15 well-known manufacturers."

(186)

The rating of mechanical refrigerators. Refrig. Engin. 20: 94-101. 1930. (Editorial, p. 77.)

Transcript of discussion of the technical basis for a standard test for self-contained domestic refrigerating equipment during a conference arranged by the Detroit section of the American Society of Refrigerating Engineers.

(187)

Armstrong cork has cabinet test room. Elect. Refrig. News, Engin. Sect. 6 (5): 1, 3. 1931.

Describes the new refrigerator Life Test Room with a capacity of 40 refrigerator cabinets and with equipment to measure all factors in refrigerator performance and to subject the cabinets to standard or to extreme conditions.

(188)

Dry-zero opens new laboratory to aid industry; effects of long service on cabinet efficiency to be studied. Elect. Refrig. News 6 (28): 1, 4, illus. 1932.

Describes new kind of laboratory, where insulating materials and refrigerator cabinets can be subjected within a few weeks to wear ordinarily encountered only in years of actual service.

(189)

Tentative test procedure developed by E. T. L. New York laboratory proposes standardsfor rating household refrigerators. Elect. Refrig. News 8 (12): 28-29. 1933.

Applies to mechanical refrigerators.

REFRIGERATOR TESTING (CONTINUED)

American Standards Association (190)

Code for testing domostic refrigerators using ice. B38cl-1931. 8 p., illus. New York, American Standards Association. 1931. (Reprinted in Ice and Refrig. 82: 305-306, illus. 1932; text reprinted in Refrig. Engin. 23: 295-296. 1932.)

Approved as an American recommended practice. December 24, 1931.

Belshaw, C. F. (191)
Refrigerator icing methods. Refrig. Engin. 19: 12-15, illus. 1930.

Bright, G. B. (192)

Comparative tests of household refrigerating machines. Refrig. Engin. 13: 323-352, illus. 1927.

Technical report of a comprehensive study.

Churchill, J. B. (193)
The evaluation of the fractional ton refrigerating machine. Refrig.
Engin. 15: 67-70, illus. 1928.

Eagles, H. W. (194)
Thermal testing of refrigerator cabinets. Refrig. Engin. 21: 411-416,
428, illus. 1931.

Ettinger, W. J., and McPherson, H. W. (195)

Measurement of rate of heat flow into refrigerator cabinets. Refrig.

Engin. 16: 168-174, illus. 1928.

Frazier, R. T. (196)
Factory testing of refrigerators. Refrig. Engin. 20: 159-163, illus. 1930.

A full description of the construction and operation of an insulated room, with temperature control, built for factory testing of ice-cooled household cabinets according to the test code developed by the American Society of Refrigerating Engineers. Details of layout, apparatus installed and costs. Sample test data.

Know truth about refrigerators. Refrigeration 48 (3): 29-30, 42, illus. 1930.

Popular article.

Heath, D. P. (198)
Zoning the United States for refrigeration. Refrig. Engin. 16: 175-177,
illus. 1928.

Lindsay, H. B. (199)
Proposed E. T. L. test code inadequate because durability is omitted,
Harvey Lindsay declares. Elect. Refrig. News 8 (16): 11, illus. 1933.

REFRIGERATOR TESTING (CONTINUED)

National Electric Light Association

(200)

Report of electric refrigeration committee, 1924-25. Commercial National Section. 67 p., illus. New York, National Electric Light Association. 1925.

Includes on pages 34 to 58 detailed report of tests of electric and ice-cooled refrigerators.

Paine, F. D. (201)

Some laboratory installations now used for the study of electrical household equipment. 36 p., illus. New York City, National Electric Light Association. 1930.

Pearce, G. T. (202)
Testing refrigerator cabinets. Refrig. Engin. 24: 158-159. 1932.

Pennington, M. E. (203)

Testing and grading household refrigerators. Ice and Refrig. 73: 330-333, illus. 1927. (Also in Refrig. World 62 (11): 17-21, illus. 1927; and Refrigeration 42 (3): 67-70, illus. 1927.)

Porter, M. B. (204)

Temperature and ice consumption in an ice-cooled refrigerator as affected by room temperature. Refrig. Engin. 18: 93-96, illus. 1929.

Report of research in the technique of refrigerator cabinet testing in the Bureau of Home Economics.

(205)

A test of five ice-cooled household refrigerators. Ice and Refrig. 78: 49-50. 1930.

Describes experiment conducted in the laboratories of the U. S. Bureau of Home Economics.

Roe, C. H., and Thompson, G. (206)
Testing ice refrigerators under two codes. Refrig. Engin. 21: 106-111,
136, 138, illus. 1931.

Starr, J. E. (207)

Tests on household refrigerating machines. Ice and Refrig. 70: 517-518. 1926.

Criticism of sections of the 1925 report of the National Electric Light Association.

Thompson, G. (208)
Thompson answers Lindsay's criticism of E. T. L. test procedure. Elect.
Refrig. News 9 (3): 21. 1933.

Timmerman, W. W., and Whitesel, H. A. (209)
Testing domestic refrigerators. Refrig. Engin. 15: 151-156, 158, illus.
1928.

REFRIGERATOR TESTING (CONTINUED)

U. S. Department of Commerce, Bureau of Standards
Measurements for the household. U. S. Dept. Com., Bur. Standards Circ.
55: 50-54, illus. 1915.

Discusses principles of refrigeration and operation of an ice-cooled refrigerator. Table shows results of tests on nine refrigerators.

Vilas, F. E. (211)
Tests on gas refrigerators. Refrig. Engin. 19: 97-99, illus. 1930.

SIMPLIFICATION AND STANDARDIZATION

American Standards Association

(212)

American Standards Yearbook 1932-1933. 44 p. New York, American Standards Association. 1933.

Reviews work of association. Contains index to approved American standards and incompleted projects.

National Electrical Manufacturers Association (213)
Recommended standard method of computing the gross volume, the net food storage volume and the food shelf area of domestic refrigerators.

Approved standards, Refrigeration Division. 5 p. May 29, 1931.

[Mimeographed.]

Perham, D. E. (214)
Chicago steamfitters devise standards for refrigerating equipment. Elect.
Refrig. News, Engin. Sect. 7 (17): 4. 1932.
From a local survey of small refrigerating installations by the Chicago Master Steamfitters' Association.

U. S. Department of Commerce, Bureau of Standards (215)

Ice cake sizes. Simplified Practice Recommendation R96-28. Refrigerator ice compartments S.P.R. 109-29. U. S. Dept. Com., Bur. Standards. 1929 and 1930.

(216)

Ice cream brick molds and cartons. U. S. Dept. Com., Bur. Standards Simplified Practice Recommendation R120-31, 13 p. 1931.

SAFETY AND SAFETY CODES

Anonymous

(217)

New York City safety code for refrigeration. Ice and Refrig. 75: 13-16. 1928. (See also Elect. Refrig. News 2 (9): 25-27, illus. 1928.)

Complete text of the New York City safety code.

(218)

What is the best refrigerant? Refrig. Engin. 17: 182-184, illus. 1929.

Discussion illustrated by a diagram showing "popular" and
"technical" qualities of six common refrigerants.

SAFETY AND SAFETY CODES (CONTINUED)

Anonymous

(219)

Must develop safe refrigerants. Hygeia 8: 835. 1930. Comments on report of Committee on Poisonous Gases. American

Comments on report of Committee on Poisonous Gases, American Medical Association.

(220)

Misleading methyl chloride publicity. Jour. Amer. Med. Assoc. 96: 270-271. 1931.

Report 3 of the Committee on Poisonous Gases, American Medical Association, on "Artic." (Editorial comment, p. 271-272.)

American Society of Refrigerating Engineers (221)
American standard safety code for mechanical refrigeration. Amer.
Standards Assoc. B9-1933, 31 p., illus. New York. 1933. (Original not seen.)

Covers all types of refrigerating systems.

Churchill, J. B.

(222)

New refrigerants. Refrig. Engin. 19: 60. 1930.

Possibilities for development in the chemical field.

(223)

Misleading propaganda on refrigerants. Refrig. Engin. 21: 269-271, illus. 1931.

. "A reply to the committee on poisonous gases of the American Medical Association," by a chemist and consulting engineer.

and Williams, E. T. (224)

Hazards of gas leakage as affected by ventilation. Effect of ventilation on the concentration of escaping gas, and possible toxicity and flammability hazards, with special reference to methyl chloride. Refrig. Engin. 25: 256-260, illus. 1933.

Connolly, J. I., Claffy, T. J., and Aeberly, J. J. (225)
Difficulties encountered in the control of mechanical refrigeration.

Amer. Jour. Pub. Health 20: 252-256. 1930.

Industrial and Engineering Chemistry (226)
Refrigeration and refrigerants. Indus. and Engin. Chem. 24: 616-630,
641-645, illus. 1932.
A group of papers, some titles bearing on home refrigeration.

McCord, C. P.

Household mechanical refrigeration with special reference to the toxicity of refrigerants utilized. Jour. Amer. Med. Assoc. 94: 1832-1838. 1930.

Report 2 of Committee on Poisonous Gases of the American Medical Association. Report 1 was devoted to carbon monoxide poisoning.

Members of the committee: H. Gideon Wells, Chairman, Yandell Henderson, L. R. Thompson, P. N. Leech, and Carey P. McCord. 23 supporting references.

SAFETY AND SAFETY CODES (CONTINUED)

Midgley, T., Jr., and Henne, A. L.
Organic fluorides as refrigorants. Indus. and Engin. Chem. 22: 542-545,
illus. 1930.

Roessler & Hasslacher Chemical Co., Inc. (229)
Artic: the refrigerant. Ed. 3, 39 p., illus. New York. 1930.
Third edition of a manual, which gives the physical and physiological properties and performance data of Artic, or methyl chloride, for refrigeration purposes.

Sayers, R. R., Yant, W. P., Thomas, B. G. H., and Berger, L. B. (230)
Physiological response attending exposure to vapors of methyl bromide,
methyl chloride, ethyl bromide, and ethyl chloride. U. S. Pub. Health
Serv., Pub. Health Bul. 185, 56 p., illus. 1929.

Technical. Detailed results of a study of the comparative toxic effects of these chemicals on guinea pigs. Graphs and tables. Comparisons also with effects of other common gases and vapors.

Starr, J. E. (231)
Tables on the properties of gases. Ice and Refrig. 79: 206. 1930.
Technical. How to calculate safe quantities of certain refrigerants for room of given size.

Wynne, S. W., and Oberwager, J. (232)
Refrigerating systems and public health. Jour. Amer. Med. Assoc. 94:
1061-1062. 1930.

Summarizes the New York City safety code and makes three recommendations for improvement.

Yant, W. P., Shoaf, H. W., and Chornyak, J. (233)
Observations on the possibility of methyl chloride poisoning by ingestion
with food and water. Pub. Health Rpts. [U. S.] 45: 1057-1065, illus.
1930.

Results of a study made by experiments with dogs.

SUMMER AIR CONDITIONING

Anonymous (234)

The windowless house of perpetualspring. Refrig. World 66 (7): 23-24, illus. 1931.

A brief description of the research house built by an electrical manufacturing concern to study heating and ventilating problems.

American Society of Heating and Ventilating Engineers (235)

American Society of Heating and Ventilating Engineers Guide. 1933.

Vol. 11, xiv + 767 + 64 p., illus. New York. 1933.

Annual publication, containing complete and up-to-date information on heating, ventilating, and air conditioning.

SUMMER AIR CONDITIONING (CONTINUED)

Ankenmann, J. W.

(236)

Calculation of load required for space cooling. Refrig. World 67 (1): 31-32, 63-65. 1932.

Simple, though somewhat technical, description of method which appears equally applicable for place of business or residence.

Brandt, E. A. (237)

Air conditioning with ice. Ice and Refrig. 82: 345-346. 1932.

Discusses methods, investment costs, operating charges, amount of equipment involved, etc.

Carrier, W. H. (238)

The control of humidity and temperature as applied to manufacturing processes and human comfort. Heating, Piping and Air Conditioning 1: 535-543, 605-616, illus. 1929. (See also Ice and Refrig. 80: 224-228, illus. 1931.)

Paper presented at the World Engineering Congress held in Tokyo. Outlines history of development of air conditioning, states and demonstrates underlying principles, and describes the various types of equipment in modern use.

Kratz, A. P., and Konzo, S. (239)
Study of summer cooling in the research residence at the University of
Illinois. Heating, Piping and Air Conditioning 5: 115-126, illus. 1933.

Milener, E. D. (240)

Summer air-conditioning of residences; the use of capillary attraction and gas heat energy. Refrig. Engin. 23: 147-154, illus. 1932.

Report of researches sponsored by Committee on Industrial Gas
Research of American Gas Association.

Scott, C. E. (241)

The small air-conditioning job. Refrig. Engin. 23: 15-16, 29, illus. 1932.

General statement of problem of comfort cooling with analysis of heat requirements involved. Application to an office room 18 by 14 by 9, with definite occupancy and exposure.

Stevenson, A. R., Jr., Faust, F. H., and Roessler, E. W. (242)
Application of refrigeration to heating and cooling of homes. Refrig.
Engin. 23: 83-90; discussion, 218, 224, 235, illus. 1932.

Walker, J. H., and Helmrich, G. B. (243)
Summer cooling operating results in a Detroit residence. Heating, Piping and Air Conditioning 5: 127-132, illus. 1933.

BIBLIOGRAPHIES AND ABSTRACTS

Beard, B. B. (244)

Electricity in the home. 168 p. New York, Workers' Education Bureau Press. 1927.

List of books and articles with brief abstracts.

Bercaw, L. O. (245)
Refrigeration and cold storage. U. S. Dept. Agr. Library Bibliographical
Contributions No. 10, 58 p. 1925. [Mimeographed.]
Selected references covering 1915-1924 and early part of 1925,
chiefly on commercial refrigeration.

Carlsson, V.

Abstracts on recent research in cookery and allied subjects. I. Refrigeration. II. Ice cream and freezing. Columbia Univ., Teachers Col. Rec. 31: 320-331, 468-482. 1930. (Reprinted by the Bureau of Publications, Teachers Col., Columbia Univ. 1930.)

Contains references to historical background starting in 1000 B. C.

Committee on the Relation of Electricity to Agriculture. (247)
Electricity on the farm and in rural communities. Committee on the
Relation of Electricity to Agriculture Bul. 7 (1), 332 p., illus.
Chicago. 1931.
Bibliography, including household refrigeration, p. 311-327.

U. S. Department of Commerce, Bureau of Standards
Information on refrigeration. U. S. Dept. Com., Bur. Standards Letter
Circ. 30, rev., 11 p. 1928. [Mimeographed.]
Mainly for commercial installations, but contains some references
on household refrigeration.

PERIODICALS

Current articles on household refrigeration and related subjects appear in the professional and trade journals listed below. From time to time many of the household magazines also contain popular articles on this subject

- Bureau of Standards Journal of Research. Monthly. U. S. Department of Commerce, Washington, D. C.
 Contains technical papers, frequently on refrigeration problems.
- Electric Refrigeration News. Weekly. 550 Maccabees Bldg., Detroit, Mich.
 Business newspaper of the electric refrigeration industry, especially household refrigeration. Includes air conditioning.
- Experiment Station Record. Monthly. U. S. Department of Agriculture, Washington, D. C.

 Abstract journal for scientific agriculture and home economics.
- Heating, Piping and Air Conditioning. Monthly. 1900 Prairie Ave.,
 Chicago, Ill.
 Trade journal. Includes Journal Section of American Society of Heating and Ventilating Engineers.
- Ice and Refrigeration. Monthly. 435 N. Waller Ave., Chicago, Ill.

 Business newspaper for ice and refrigeration industries. Official publication of the American Institute of Refrigeration, the National Association of Ice Industries and other trade and professional organizations.
- Journal of Home Economics. Monthly. 101 E. 20th St., Baltimore, Md.
 Official organ of the American Home Economics Association. Publishes
 abstracts, reviews, and occasional articles on household refrigeration.
- Merchandising Ice. Monthly. 435 N. Waller Ave., Chicago, Ill.

 Trade journal, issued by publishers of Ice and Refrigeration. Special section on home service work for the ice industry.
- Refrigerated Food News. Monthly. 550 Maccabees Bldg., Detroit, Mich. Issued by the publishers of Electric Refrigeration News for the quick-frozen food industry.
- Refrigerating Engineering. Monthly. 37 W. 39th St., New York City.

 Official journal of the American Society of Refrigerating Engineers.

 Publishes abstracts, reviews and articles, which embrace the entire field including household refrigeration. (Issue for June 1933 contains 20 signal popular essays under the general title, "A Century of Progress.")
- Refrigerating World. Monthly. 25 W. Broadway, New York City.
 A trade journal mainly for the commercial field.
- Refrigeration. Monthly. 711-715 Glenn St. SW, Atlanta, Ga. Business paper of the refrigerating industries.

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